

|  | Application No.   | Applicant(s)   |
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| •  | 10/707 007  | DENC ET AL   |
| Notice of Allowability   | 10/797,007<br>Examiner  | PENG ET AL. Art Unit   |
|  |   |  |
|  | Mujtaba K. Chaudry  | 2112   |
| The MAILING DATE of this communication app<br>All claims being allowable, PROSECUTION ON THE MERITS IS<br>herewith (or previously mailed), a Notice of Allowance (PTOL-85<br>NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT R<br>of the Office or upon petition by the applicant. See 37 CFR 1.31 | S (OR REMAINS) CLOSED in<br>) or other appropriate commu<br>RIGHTS. This application is s | this application. If not included inication will be mailed in due course. THIS |
| 1. This communication is responsive to <u>9/21/2007</u> .  |   |  |
| 2. The allowed claim(s) is/are <u>6-22</u> .   |   |  |
| <ul><li>3. ☐ Acknowledgment is made of a claim for foreign priority u</li><li>a) ☐ All b) ☐ Some* c) ☐ None of the:</li></ul>  |   | or (f).  |
| <ol> <li>Certified copies of the priority documents have</li> </ol>  | e been received.  | •  |
| 2.  Certified copies of the priority documents have  | e been received in Applicatio   | n No   |
| <ol><li>Copies of the certified copies of the priority do</li></ol>  | ocuments have been received   | in this national stage application from the                                    |
| International Bureau (PCT Rule 17.2(a)).   |   |  |
| * Certified copies not received:   |   |  |
| Applicant has THREE MONTHS FROM THE "MAILING DATE" noted below. Failure to timely comply will result in ABANDONI THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.  |   | a reply complying with the requirements  |
| 4. A SUBSTITUTE OATH OR DECLARATION must be subminFORMAL PATENT APPLICATION (PTO-152) which give   |   |  |
| 5. CORRECTED DRAWINGS (as "replacement sheets") mu   | ist be submitted.   |  |
| (a) including changes required by the Notice of Draftsper  |   | ( PTO-948) attached  |
| 1) 🔲 hereto or 2) 🔲 to Paper No./Mail Date   |   |  |
| (b) including changes required by the attached Examiner<br>Paper No./Mail Date   | 's Amendment / Comment or   | in the Office action of  |
| Identifying indicia such as the application number (see 37 CFR each sheet. Replacement sheet(s) should be labeled as such in   |   |  |
| 6. DEPOSIT OF and/or INFORMATION about the deposit attached Examiner's comment regarding REQUIREMENT   |   |  |
|  |   |  |
|  |   | •  |
| Attachment(s)  | •   |  |
| 1. Notice of References Cited (PTO-892)  | 5. Notice of Inf  | formal Patent Application  |
| 2. Notice of Draftperson's Patent Drawing Review (PTO-948)   |   | ummary (PTO-413),  |
| 3. Information Disclosure Statements (PTO/SB/08),  |   | Mail Date <u>10/1/2007</u>   |
| Paper No./Mail Date  | 7. 🖂 Examiners  | Amendment/Comment  |
| 4. Examiner's Comment Regarding Requirement for Deposit  | 8. 🛭 Examiner's   | Statement of Reasons for Allowance   |
| of Biological Material   | 9. 🔲 Other  |  |
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| ODD 10/1/07  | ·   | •  |

## **DETAILED ACTION**

Applicants' response was received September 21, 2007.

- Claims 1-5 were rejected.
- Claims 1-5 are cancelled.
- Claims 6-22 were previously allowed.
- Claim 6 is amended with minor correction.
- Reasons for allowance stated.

Application allowed.

# **EXAMINER'S AMENDMENT**

An Examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this Examiner's amendment was given in a telephone interview with Alun Palmer on Monday, October 01, 2007.

Please amend the application as follows:

# Please replace claim 6 with:

Claim 6. A method for generating an error detection code of a data sector with sector data information and main data comprising:

generating a first error detection code according to the sector data information and the main data, wherein the sector data information is substituted by a first substitutional value;

generating a second error detection code according to the sector data information and the main data, wherein the main data is substituted by a second substitutional value; and

generating the error detection code by operating on the first error detection code, the second detection code and a correction constant, wherein the correction constant is derived depending on the first substitutional value and the second substitutional value;

wherein the first error detection code is generated when the main data is read from a host.

## Reasons for Allowance

Claims 6-22 are allowed. The following is an Examiner's statement of reasons for indicating allowable subject matter:

Independent claim 6 of the present application teaches a method for generating error detection code of a data sector with sector data information and main data, comprising the following steps: generating a first error detection code according to the sector data information and the main data, wherein the sector data information is substituted by a first substitutional value; generating a second error detection code according to the sector data information and the main data, wherein the main data is substituted by a second substitutional value; and generating the error detection code by operating on the first error detection code, the second detection code

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and a correction constant, wherein the correction constant is derived depending on the first substitutional value and the second substitutional value; wherein the first error detection code is generated when the main data is read from a host. The foregoing limitations are not found in the prior arts of record. For example, Weaver (USPN 5935268) teaches a method of generating an error detection code for a modified binary data block, the modified data block being derived from an original binary data block having a first error detection code associated therewith, the method comprising the steps of: modifying the original data block utilizing first data to generate the modified data block; calculating a second error detection code for the first data; and adding the first and second error detection codes so as to generate a third error detection code for the modified data block. Particularly, none of the prior arts of record teach nor fairly suggest, alone or in combination, "...generating a first error detection code according to the sector data information and the main data, wherein the sector data information is substituted by a first substitutional value; generating a second error detection code according to the sector data information and the main data, wherein the main data is substituted by a second substitutional value; and generating error detection code by operating the first error detection code, the second detection code and a correction constant, wherein the correction constant is derived depending on the first substitutional value and the second substitutional value..." Emphasis added.

Dependent claims 7-9 depend from allowable independent claim 6 and inherently include limitations therein and therefore are allowed as well.

Independent claim 10 of the present application teaches a method for generating error detection code of a data sector with sector data information and main data, comprising: generating a first error detection code according to the sector data information and the main data,

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wherein the sector data information is substituted by a first substitutional value; generating a second error detection code according to the sector data information; and generating the error detection code by operating the first error detection code, the second detection code and a correction constant, wherein the correction constant is derived depending on the first substitutional value; wherein when generating the second error detection code, the main data is substituted by 0. The foregoing limitations are not found in the prior arts of record. For example, Weaver (USPN 5935268) teaches a method of generating an error detection code for a modified binary data block, the modified data block being derived from an original binary data block having a first error detection code associated therewith, the method comprising the steps of: modifying the original data block utilizing first data to generate the modified data block: calculating a second error detection code for the first data; and adding the first and second error detection codes so as to generate a third error detection code for the modified data block. Particularly, none of the prior arts of record teach nor fairly suggest, "... generating a first error detection code according to the sector data information and the main data, wherein the sector data information is substituted by a first substitutional value; generating a second error detection code according to the sector data information; and generating the error detection code by operating the first error detection code, the second detection code and a correction constant, wherein the correction constant is derived depending on the first substitutional value; wherein when generating the second error detection code, the main data is substituted by 0." Emphasis added.

Dependent claims 11-15 depend from allowable independent claim 10 and inherently include limitations therein and therefore are allowed as well.

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Independent claim 16 of the present application teaches a method for generating a plurality of error detection codes of a plurality of data sectors with a plurality of different sector data information and same main data, comprising the following steps: generating a first error detection code according to the same main data, wherein each different sector data information are respectively substituted by a corresponding first substitutional value; generating a plurality of second error-detection codes according to each corresponding different sector data information; and generating a plurality of error detection codes by operating on the first error detection code, the corresponding plurality of the second error detection codes, and a correction constant; wherein the first error detection code is generated when the main data is read form a host. The foregoing limitations are not found in the prior arts of record. For example, Weaver (USPN 5935268) teaches a method of generating an error detection code for a modified binary data block, the modified data block being derived from an original binary data block having a first error detection code associated therewith, the method comprising the steps of: modifying the original data block utilizing first data to generate the modified data block; calculating a second error detection code for the first data; and adding the first and second error detection codes so as to generate a third error detection code for the modified data block. Particularly, none of the prior arts of record teach nor fairly suggest, "... generating a first error detection code according to the same main data, wherein each different sector data information are respectively substituted by a corresponding first substitutional value; generating a plurality of second error-detection codes according to each corresponding different sector data information; and generating a plurality of error detection codes by operating on the first error detection code, the corresponding plurality

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of the second error detection codes, and a correction constant; wherein the first error detection code is generated when the main data is read form a host." Emphasis added.

Dependent claims 17-22 depend from allowable independent claim 16 and inherently include limitations therein and therefore are allowed as well.

## Conclusion

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mujtaba K. Chaudry whose telephone number is 571-272-3817. The examiner can normally be reached on Mon-Fri 9-7:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jacques Louis-Jacques can be reached on 571-272-6962.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Mujtaba Chaudry Art Unit 2112

October 1, 2007